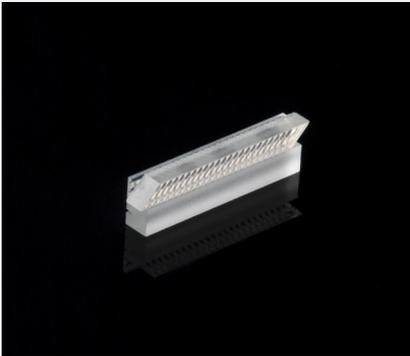


Beam Transformation System

BTS(FAC160)-P0.2 FS for very high power bars



Features and Advantages

Beam Transformation System (BTS) for diode laser bars with up to 50 emitters: emitter size up to 100 μm , emitter pitch 200 μm . The BTS is used to make the beam parameter product of diode laser bars symmetrical for free beam lasers or fiber coupling.

The BTS consists of a FAC160 fast axis collimation lens, a lens array made of low OH fused silica for 90° rotation of the emitters and a bottom tab. The BTS is optimized for power > 300W cw.

Product Specifications

Specification Data ⁽¹⁾	Unit	Value
Material		Fused Silica (IR grade, low absorption)
Length (L)	mm	12 \pm 0.1
Width (W)	mm	0.8 \pm 0.1
Clear aperture	mm ²	10.0 x 0.25
Back focal length BFL @ 980 nm	mm	0.034
Pitch	mm	0.2
Gap	mm	0.0 \pm 0.01
Numerical aperture (NA)		FA: 0.5 SA: 0.09
Transmission	%	> 98
Remaining divergence (FW1/e ²) for fast axis ⁽²⁾	mrad	< 12

Product Code	MOD000749 ⁽¹⁾	
Specification Data	Unit	Value
AR-coating	nm	940 - 998
Thickness (T)	mm	2.06 \pm 0.05

⁽¹⁾ Example for customization – customized coatings and different pitches (e.g. 0.4 or 0.5mm) on request.

⁽²⁾ Depending on laser parameters / specification is valid for an emitter-height of 1 μm and no smile of the laser diode.

Product Dimensions (mm)

